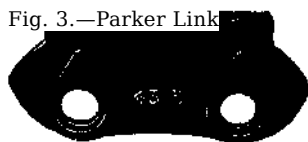


is a considerable advance on the square-ended links previously used. The great advantage secured is that the amount of fuel which dropped through the grate, into the pits below it, was reduced to considerably less than half. The importance of this point will be realized when a station burning say

Fig. 3.—Parker Link



5000 tons of coal per week is considered. After the old square-ended link had been in service a little time, and had got worn, it was found that as much as 30 per cent, or almost 1500 tons of coal per week, fell through the grates into the pits below. All this coal had to be picked up again and returned to the stokers by hand labour. The Parker link, after an equal length of service, was found to reduce the amount of droppings to between 12 and 15 per cent, or say 600 tons of coal per week. An amount of even 600 tons per week is considerable, and the author set to work to secure, if possible, the advantages of both these links, and an improvement on them. A new link was designed, and after nine years' service the droppings in a grate fitted with it were found

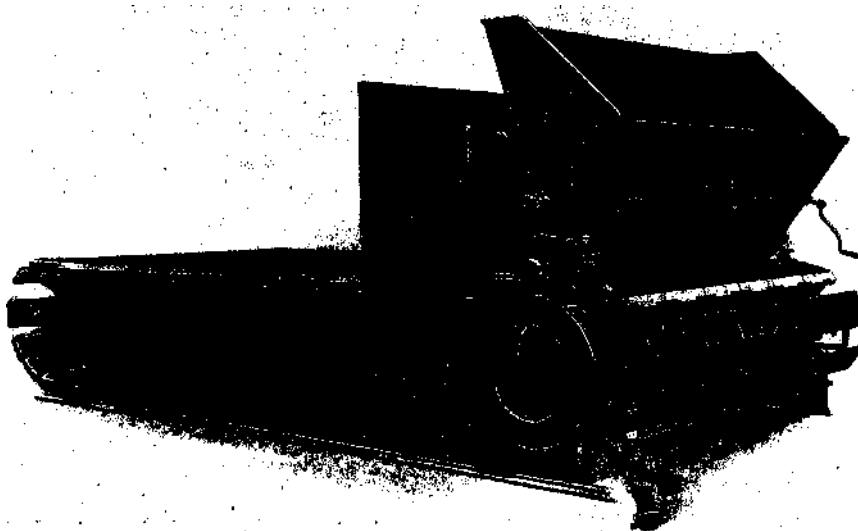


Fig. 4.—Type " A " Travelling Grate

to be 4 per cent. Further, by a very simple arrangement of the driving links, breakages of these links have been reduced to a minimum.

Now the above grates are only suitable for induced-draught conditions. When low-grade fuels have to be burnt, this type of

travelling-grate stoker
is of little use as, under ordinary induced-draught
conditions, splint coal by
itself will not burn, and can only be kept alight where an
expert fireman
is available, and when he gives the furnace his entire
attention.